and, from these, electrotype matrices were produced. Mr. Evans also exhibited to the Society a process-block reproduction in black and white line-drawing of the largest of the clay tablets upon which is the longest inscription yet found at Knossos: it was unearthed this year. At the end of two of the 25-odd lines of this inscription occur the signs for two numbers, 31 and 23, each being preceded by the "man" sign. Before this sign stand in each case the same three characters, the meaning of which must be "total," as there are plainly 31 units marked on the lines preceding the "total 'man' 31," and 23 units plainly recorded on the lines preceding "total 'man' 23." This is one of the ways in which some progress towards decipherment has already been made. Mr. Evans related another case in point. Having noticed in a museum of the Levant three specimens of the clay tablets found at Knossos, which he was confident ought to have been among the treasures handed over by him to the Museum at Candia, he scrutinized them carefully, and, by certain marks upon them (horizontal scores), he identified them as found in a definite magazine of the "House of the Double-Axe" where he had employed a workman, since discharged. These observations resulted in a term of imprisonment for the workman, who was, at the moment he was speaking, still "in durance vile"thanks to the careful housekeeping of old King Minos, no less carefully interpreted by the modern discoverer of his storagerecords.

-Mr. Evans pronounced the scores by which these abstracted tablets had been identified along with their "abstractor." to be hardly distinguishable from those on the component parts of a beautiful bracelet (of gold, lapislazuli, and turquoise) which Professor Flinders Petrie had shown two nights before in a lecture on the beginnings of Egyptian history given before the Oxford Architectural Society. By carefully noting the scores, Professor Petrie had been enabled to group them together as the almost prehistoric goldsmith required, and the beauty and symmetry of the resulting design were surely the method's best justification. The bracelet in question was unearthed in a tomb which had already been dealt with by M. Amélinau. Indeed, Professor Petrie and the Egypt Exploration Fund are certainly to be congratulated on the treasures discovered where recent researches were supposed to have left nothing to be found. Perhaps the most remarkable among Professor Petrie's new revelations was one which exemplifies the scientific perfectibility of archæological research, when its methods are constantly readjusted by one possessing the necessary experience and insight. Having to deal, during his campaign just closed, with a site which contained, in successive layers, the remains, easily distinguished, of successive kings of the First Egyptian Dynasty, and also, below all these, the remains of several continuous, prehistoric periods, Professor Petrie hit upon the leading idea of minutely classifying, by means of a card-catalogue, the whole mass of pottery belonging to all these successive layers. Having spared none of the minutest pains imaginable in his classification of successive forms, our discoverer then tabulated his results, and, by skilful grouping, obtained a sort of chronology by which the development in the manner of fashioning pots can

be followed from beginnings far earlier than the Herodotean Menes down through successive prehistoric strata into the continuous line of the kings of the First Dynasty. A moment's reflection will show how invaluable such a careful scheme of "fictile" progression must be, as giving an independent hold upon early Egyptian chronology. In fact, Professor Petrie called attention to the interesting circumstance that he had already derived, from the materials thus classified, a striking confirmation of the too often rashly impugned chronology of early Egyptian history as handed down to us by Manetho. Now, less than ever, can-it be maintained that Manetho's dynasties of Egypt were not, as he represents them, continuous and successive.

BARTON'S SEMITIC ORIGINS.

A Sketch of Semitic Origins, Social and Religious. By G. A. Barton, A.M., Ph.D., Associate Professor of Biblical Literature and Semitic Languages in Bryn Mawr College. The Macmillan Co. 1902. Pp. xiv, 342.

In the preface to this book, Professor Barton confesses, ingenuously enough, that to many Semitists his undertaking will certainly appear premature, and a satisfactory solution of his problem impossible. But he also records his conviction that his studies have led him "to the discovery of the path trodden by the Semites in the fourney from savagery to civiliza-This is a large claim, and doubttion." ers will be many. The lamented Robertson Smith published, in a single monumental volume, lectures which he regarded as covering less than one-third of the scope of Professor Barton's book, and did not claim in these to have described a key which would open all the locks. He was a consummate scholar and the master of a perfectly balanced mind, and so, though we now know that his sociological authorities had in part misled him, his work remains and need never be done again. How it will be with Professor Barton's it is cheap guessing. To the present reviewer, his results should have appeared in the tentative form of articles in the transactions of some society, and been limited closely to a study of the Ishtar cult.

But the book is here, and some estimate of it must be attempted. It begins with the beginning of things in a chapter of investigation as to the cradle of the Semites. That is placed in North Africa, where the Hamites and Semites formed one people; no attempt is made to define that elusive term Hamite. From Africa the Semites, now separate from the Hamites, passed to Arabia and thence dispersed. The view is thus the ordinary Afro-Arabian one. The treatment of the subject is second-hand to a degree; Dr. Barton, indeed, makes no claim to authority either in ethnology or in Egyptology. The decision, therefore, with which he rejects the opinions of Erman and other Egyptologists of the first rank on Egyptian language and history is remarkable enough. The whole chapter is uncalled for, is premature, and unnecessary to his book. His thesis could begin, and, so far as his firsthand contributions are concerned, should have begun, with the Semites in Arabia.

That thesis may be put shortly as fol-

lows: We must presuppose a primitive stage among the Semites when they were formed into totemistic clans; the marriage relationship was vague and uncertain, and lasted, at best, for a very short term-practically beena marriages; descent was reckoned through women, who remained with their own kindred; there was no conception of chastity, rather a reverence for the powers and means of reproduction; women thus had positions of considerable independence and authority. From this developed, in one direction, a Nair type of polyandry of which comparatively slight traces have survived, and, on another, of Thibetan polyandry through the formation of the more daring and enterprising into warlike and trading clans. These went out from the oases, plundered, traded, and captured women, and passed in time from polyandry into polygamy. With the change came male kinship, a declension in the position of women, and the baal conception of marriage which was finally fixed in Islam. Further, Dr. Barton holds that even in the most primitive Arabia the pastoral and semi-agricultural stage had been reached with especial cultivation of the date-palm. This, it will be noticed, is a modification of Robertson Smith's view rendered necessary by the present change of attitude towards Mc-Lennan's hard-and-fast sociological law which laid down a regular development from promiscuity through polyandry to polygamy. Against the simple matriarchate. Dr. Barton lavs stress on primitive beena marriages, slackened by frequency of divorce and a light attitude towards chastity, or, rather, a putting of unchastity, as an expression of fertility, under religious sanctions. We thus pass from Dr. Barton's sociological to his religious hypothesis.

The absolute beginnings of Semitic religion he does not attempt, but contents himself with the probability "that among them religion did not originate in ancestorworship." The point round which his interest centres is the goddess Ishtar, for him the most primitive and original figure in the Semitic pantheon, and not an intraduction from the non-Semitic world. Her worship is found among all the Semitic peoples, and Dr. Barton regards all Semitic deities which are not introductions from without as transformations or modifications of her. She was a mother-goddess, typifying the earth with its fertility; the patroness of sensuality, of the easily slipped and short-lived marriage tie, and even of absolutely promiscuous sexual intercourse. Originally, she was a water-goddess, the divinity of a never-failing spring, and beside her stood a son, a sacred palmtree, to which she gave life. The picture is thus of the typical Arabian oasis, a spring in the desert, with a palm dependent upon it. With this connects the myth of Tammuz, who is represented at one time as the son of Ishtar, at another as the first of her series of husbands, and last as the lost husband of her youth. This development in the Semitic myth follows step by step the development in the Semitic family. In the earliest Semitic family, the chief figure would be the mother, and the chief male, her son-the spring and palmtree. Then Tammuz came to be viewed as a rejected husband "when marriage was still temporary and women quite free, but

when the original family relations between Ishtar and Tammuz had been forgotten." In the third form of the myth is a reflection of the later, more permanent, marriage bond. All this certainly might be a great deal clearer and is far from final, but, as a working hypothesis, there is much to be said for it. The source of all Semitic religions, according to it, is found in one form or other of the sexual principle. The male and female date-palm, fecundated by the wind, struck the sexually minded Semite as an exhibition of divine approval. A spring was to him the veritable water of life. Circumcision was a consecration of the same principle. The miscellaneous sexual intercourse practised under divine sanction at so many shrines, especially the solemn sacrifice of virginity, of which we have record here and there in the Semitic world, is a survival from the old times with their primitive ideas of worship and of the divine. Religious conservatism here perpetuated practices which the feeling of the race had otherwise gradually rejected.

From this goddess Ishtar, then, by development, change, and combination came the other Semitic deities. As the tribes became more warlike and needed warlike leaders, as the system of male kinship developed, Ishtar tended to pass from a goddess into a god. Sometimes she survived independently in the middle of a pantheon that had grown up out of herself. So in Babylon; yet there Ishtar was a goddess of war quite as much as of love. At other times she remained as a consort of a male deity also developed from herself. These transformations Dr. Barton works out with great minuteness, and really produces a very considerable amount of evidence in their support. But into the details it would be out of place to enter here. It may be said in short (1) that he is too much inclined to support his hypotheses with other hypotheses and to go far afield for ethnological parallels. Thus, he finds the Sumerian hypothesis a useful means of explaining gods in Babylonia which he cannot reduce back to Ishtar, and supports his whole thesis on a comparison with the Aztec development, and (2) that he has apparently no idea of the variety of forces that were at work, producing and modifying early religious ideas. A chapter on survivals of the Ishtar cult goes even further in these directions, and reminds vividly of the dexterity and ingenuity of the more strenuous supporters of the sometime solar myth. But a goddess who can turn herself at any time into any of her own husbands or all of them or into her own son, remaining or not herself at the same time. has evidently Protean possibilities far ahead of any that the Sun ever enjoyed even in its most high and palmy state. The thing at times approaches closely to a reductio ad absurdum.

But the crowning triumph comes in the seventh chapter, and Jezebel and Elijah, had they but had the advantage of Dr. Barton's researches, might have made peace together, for their Yahwé himself is found to be simply another transformation of Ishtar, and therefore the same, at a few removes, as the Ashtart of Tyre. It is all very simple. The Kenite hypothesis carries Yahwé back to an Arabian tribal god. But that god, ex hypothesi, had been

transformed from the mother-goddess. therefore, etc. Support is found in many things, circumcision, oath formulæ, the passover, and the characteristic phrase, "the ashtaroth of the flock," all the palm trees which have got into the Old Testament, and some trees which are not palms, the name Yahwé itself, Dr. Barton's view of the origin of which is much more original than he seems to think. Finally come a few pages on the later development of the religion of the Hebrews, and a sketchy and uncalled-for chapter in estimate of the influence, social and religious, of the Semites on the non-Semitic world. With the prophets and still more with Jesus any thought of a development is frankly abandoned. Their attitude and teaching are posited as utterly unaccounted for by their environment; practically the Hebrew revelation-and for Dr. Barton it was a revelation-began with them and not with Moses. This is a more thorough cutting of the knot than usual, and it is improbable that it will find favor either with revelationists or evolutionists.

It must be confessed that the impression produced by this book as a whole is not a satisfactory one. Admittedly Dr. Barton is not a specialist in ethnography, sociology, or Egyptian, but he acts very much as though he were, and picks out of books the points which fit his speculations, until the Ishtar cult, on which he may fairly claim to have specialized, runs risk of being obscured by the things meant to support it. Primitive sociology is still in far too uncertain a state to render safe such a course as this. With a little reading in current sociological hand-books, almost any hypothesis might be triumphantly established. Again, Dr. Barton's tone towards those who may not or do not agree with him might often be better. Such remarks as those at the top of page 306, the condescending attitude towards Driver on page 103, the worse than condescending towards Robertson on page 275, the comment at page 38 on those Egyptologists who do not admit totemism in Egypt-all these things are not in place. Again, for a low standard in scholarship we were prepared by the most unhappy Syriac and Arabic texts and translations in Dr. Barton's two papers in Hebraica, vols. ix. and x., but it might fairly be pleaded that these bévues date from eight years ago. On page 11 of this volume, however, we discover that his German, and on page 246 that his Greek, are equally shaky. Nor is the repeated occurrence of Qa'aba for Ka'ba calculated to restore confidence in his Arabic. His etymologies, too, on the Hebrew and Arabic side, are apt to be unfortunate. Thus, Yahwé as a hiphil may mean "he causes to come about, or happen"; it cannot mean "he gives life." The difference between the roots haya and haya is very marked; as great as between werden and leben. If Dr. Barton wishes to make a connection between Yahwé and the fundamental conception in the Ishtar myth. his course is plain through Arabic; the Kenites, ex hypothesi, spoke some form of Arabic. Hawiya, 'he loved passionately, desired,' is excellent Arabic, and as good a derivative for Yahwé as most of those that have been proposed. Again, Dr. Barton's etymology of Ishtar will hardly stand; it would have been better if he had remained by Robertson Smith's cautious statement. The Hebrew'ashar and Aramaic 'athar do not

connect with the Arabic 'athara, but with ghathara. Further, the meaning of the Arabic 'athara cannot be uncertain; it occurs in too various and different phrases. It means 'to trip over, to stumble over, or into'; from it 'āthūr can be immediately derived as a pit dug for a trap, thence a deep trench either worn by a torrent or dug for irrigation. Whether 'athari (or 'aththari) is derived from the name 'Athtar is a different question. The Arabic lexicographers (Lisān, vi., p. 215) assert that the tree is so called because it "stumbles on" the water necessary to it, and does not need to be irrigated. This may seem to us far-fetched, but it is dangerous to dogmatize on the connections of thought in the Arab mind. The subject which Dr. Barton, following Robertson Smith, has opened up is wide and difficult, but if he will read carefully the related passages in the Lisān (vi.. 214 ff.; xiii., 59 ff.; xix., 271)—Lane is not sufficient-he will learn a great deal of Arabic and other things besides. He appears to be of the school, too well represented among Orientalists, which lays more stress upon striking and original hypotheses than upon respect for grammar and lexicon. His power in suggestion and fruitful hypothesis is certain; we would entreat him not to cripple and discredit himself by such looseness of scholarship as this volume displays.

THE HISTORY AND LITERATURE OF EDUCATION.

Books on Education in the Libraries of Columbia University. (Library Bulletins No. 2.) New York. 1901. Pp. 435.

Source Book of the History of Education for the Greek and Roman Period. By Paul Monroe. The Macmillan Co. 1901. Pp. 515.

The Training of Teachers and Methods of Instruction. Selected Papers by S. S. Laurie, A.M., LL.D., Professor of the Institutes and History of Education, University of Edinburgh. Cambridge (Eng.): University Press; New York: Macmillan. 1901. Pp. 295.

The Columbia catalogue of educational literature contains more than 13,500 titles, classified and indexed. It is, on the whole, a collection of very important literature, and shows the wide field with which the modern student of education must be familiar. Setting aside the conventional rubrics under which the books are classified, an analysis of the contents will be instructive. First is the large collection of literature containing facts-books on the history of education, present systems, the education of defectives, the training of teachers, methods of instruction, and the like. Second, the literature relating to development and physical health-child study, hygiene, and physical training. Third, the literature relating to the wider aspects of education-education and the church, education and the state, education and sociology, etc. Fourth, the works of the classic writers on education, containing the educational doctrines of the past and the ideals of the great schoolmasters-Plato, Comenius, Rousseau, Pestalozzi, Froebel, and Herbart. And, finally, a miscellaneous collection of literature relating to principles of education, the theory and practice of teaching, current problems, and the like.